

## CLAIMS

1. A multifunction power convertor, comprising a rectifier circuit, a filter circuit connecting with the rectifier circuit, an inverter circuit connecting with the filter circuit, differential mode voltage suppression reactors ( $LS_1, LS_2, LS_3$ ) which connect in series with the output lines (U, V, W) of the inverter circuit respectively, and filter capacitor group, said filter capacitor group consists of capacitors ( $C_3, C_4, C_5$ ) that connect in series with the output lines (U, V, W), while the other ends of capacitors ( $C_3, C_4, C_5$ ) connect in parallel and form a center point (N), characterized in that a closed magnetic ring is provided on the output lines (U, V, W) of the inverter circuit between the differential mode voltage suppression reactors and the filter capacitor group, and the closed magnetic ring is arranged in such way that the output lines (U, V, W) wind in parallel on the closed magnetic ring.
2. The multifunction power convertor claimed in claim 1 or its preamble portion, characterized in that the center point (N) of filter capacitor group connects with the center point (A) of the DC source of rectifier filter circuit and together join the ground.